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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/731,935	12/07/2000	Susumu Takagi	188-84	9786

7590

08/28/2002

Rocco S. Barrese  
Dilworth & Barrese, LLP  
333 Earle Ovington Blvd.  
Uniondale, NY 11553

EXAMINER

WACHTEL, ALEXIS A

ART UNIT

PAPER NUMBER

1771

6

DATE MAILED: 08/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-6

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/731,935		TAKAGI ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Alexis Wachtel		1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 December 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

***Detailed Action***

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,387,523 B2 to Bunyan et al in view of US 3,470,928 to Schwartz.

Bunyan et al is directed to flame retardant EMI shielding and teaches a fabric having an electrically conductive first side and a conductive or non-conductive second side (Col 5, lines 40-45). The fabric can be made of polyester (Col 5, lines 56-64). The fabric is plated with silver, nickel-silver or silver-nickel over copper plating. Examiner notes that plating is a form of coating process. The fabric can have a square weave (Col 6, lines 5-7). The fibers of the fabric may be yarns, monofilaments or preferably bundles of from 10 to 20 filaments or threads, each having a diameter of between about 10-50 micrometers. The fabric is to be used as jacketing in a fabric over foam gasket construction. Fabric drapability is described as desirable for the purpose of facilitating UL94 V-0 compliant gaskets having complex profiles or narrow cross sections down to about 1 mm. In addition the EMI shielding must be wear resistant and capable of withstanding repeated compression and relaxation cycles (Col 2, lines 5-7).

Bunyan et al as set forth above fails to teach that the EMI shielding fabric yarns or fibers are flat in shape. Schwartz teaches a fabric formed from interwoven warp and

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filling yarns which are monoaxially oriented. The yarns have a rectangular cross-section whereby the fabric has a sheet-like construction (Col 2, lines 34-40). The yarns can be multifilament yarns with a rectangular cross-section (Col 3, lines 5-11). Mono-axially interwoven yarns have a high tear and tensile strength and the resultant fabric is highly stable (Col 3, lines 29-33). Since Bunyan et al discloses that the EMI shielding fabric must be wear resistant, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have used flat multifilament yarns made of polyester rather than multifilament bundles motivated by the desire to impart to the resulting fabric greater durability.

Regarding claims 3-5 and 11-13, Bunyan et al and Schwartz do not teach the claimed flat ratios, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the strength and stability of the woven EMI fabric by selecting the appropriate flat ratios through the process of routine experimentation.

Regarding claims 6,7,14 and 15, although the claimed surface occupancy ratios, and cover factors are not explicitly taught by Bunyan et al and Schwartz, it is reasonable to presume that said limitations would be met by the combination of the two references. Support for said presumption is found in the use of similar materials (i.e. flat polyester multifilaments) and in the similar production steps (i.e. weaving fabric, then plating with metal) used to produce the EMI fabric. The burden is upon the Applicant to prove otherwise.


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### **Conclusion**

3. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Alex Wachtel, whose number is (703)-306-0320. The Examiner can normally be reached Mondays-Fridays from 10:30am to 6:30pm.

If attempts to reach the Examiner by telephone are unsuccessful and the matter is urgent, the Examiner's supervisor, Mr. Terrel Morris, can be reached at (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
ELIZABETH M. COLE  
PRIMARY EXAMINER